



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,787	10/15/2003	Pieter Gerhard Roos	03-019	7268
23418	7590	01/21/2005	EXAMINER	
VEDDER PRICE KAUFMAN & KAMMHOLZ			NGUYEN, KHANH V	
222 N. LASALLE STREET			ART UNIT	
CHICAGO, IL 60601			PAPER NUMBER	
			2817	

DATE MAILED: 01/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/685,787

Applicant(s)

ROOS ET AL.

Examiner

Khanh V. Nguyen

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/15/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-34 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 1, there is a lack of written description of “*said maximum sample signal value when said maximum value fails to traverse a predetermined lower threshold,*

said minimum sample signal value when an adjacent larger one of said plurality of sample signal values traverses a predetermined higher threshold,

a smaller of mutually adjacent ones of a pair of said plurality of sample signal values when a larger one of said pair of sample signal values traverses said predetermined higher threshold and said smaller value fails to traverse said predetermined lower threshold,

a combination of said smaller and larger ones of said pair of sample signal values when said larger value traverses said predetermined lower threshold and fails to traverse said predetermined higher threshold.”

Art Unit: 2817

Regarding claim 9, there is a lack of written description of “said maximum sample signal value when said maximum value fails to traverse a predetermined lower threshold,

said minimum sample signal value when an adjacent larger one of said plurality of sample signal values traverses a predetermined higher threshold,

a smaller of mutually adjacent ones of a pair of said plurality of sample signal values when a larger one of said pair of sample signal values traverses said predetermined higher threshold and said smaller value fails to traverse said predetermined lower threshold, and

a combination of said smaller and larger ones of said pair of sample signal values when said larger value traverses said predetermined lower threshold and fails to traverse said predetermined higher threshold.”

Regarding claim 10, there is a lack of written description of “said maximum sample signal value when said maximum value fails to traverse a predetermined lower threshold,

said minimum sample signal value when an adjacent larger one of said plurality of sample signal values traverses a predetermined higher threshold,

a smaller of mutually adjacent ones of a pair of said plurality of sample signal values when a larger one of said pair of sample signal values traverses said predetermined higher threshold and said smaller value fails to traverse said predetermined lower threshold, and

Art Unit: 2817

a combination of said smaller and larger ones of said pair of sample signal values when said larger value traverses said predetermined lower threshold and fails to traverse said predetermined higher threshold."

Regarding claim 18, there is a lack of written description of "said maximum sampled data signal value when said maximum value fails to satisfy a first one of a plurality of criteria,

said minimum sampled data signal value when an adjacent larger one of said plurality of sampled data signal values satisfies a second one of said plurality of criteria,

a smaller of mutually adjacent ones of a pair of said plurality of sampled data signal values when a larger one of said pair of sampled data signal values satisfies said second one of said plurality of criteria and said smaller value fails to satisfy said first one of said plurality of criteria, and

a combination of said smaller and larger ones of said pair of sampled data signal values when said larger value satisfies said first one of said plurality of criteria and fails to satisfy said second one of said plurality of criteria."

Regarding claim 26, there is a lack of written description of "said maximum sampled data signal value when said maximum value fails to satisfy a first one of a plurality of criteria,

said minimum sampled data signal value when an adjacent larger one of said plurality of sampled data signal values satisfies a second one of said plurality of criteria,

a smaller of mutually adjacent ones of a pair pf said plurality of sampled data signal values when a larger one of said pair of sampled data signal values satisfies said

Art Unit: 2817

second one of said plurality of criteria and said smaller value fails to satisfy said first one of said plurality of criteria, and

a combination of said smaller and larger ones of said pair of sampled data signal values when said larger value satisfies said first one of said plurality of criteria and fails to satisfy said second one of said plurality of criteria.”

Regarding claim 27, there is a lack of written description of “*said maximum sampled data signal value when said maximum value fails to satisfy a first one of said plurality of criteria,*

said minimum sampled data signal value when an adjacent larger one of said plurality of sampled data signal values satisfies a second one of said plurality of criteria,

a smaller of mutually adjacent ones of a pair of said plurality of sampled data signal values when a larger one of said pair of sampled data signal values satisfies said second one of said plurality of criteria and said smaller value fails to satisfy said first one of said plurality of criteria, and

a combination of said smaller and larger ones of said pair of sampled data signal values when said larger value satisfies said first one of said plurality of criteria and fails to satisfy said second one of said plurality of criteria.”

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references (Rossi (6,791,378); Boisvert (6,587,143); Marcovici et al. (4,739,307)) show further analogous prior art circuitry.

Art Unit: 2817

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh V. Nguyen whose telephone number is (571) 272-1767. The examiner can normally be reached from 8:00 AM - 3:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Khanh V. Nguyen', with a long horizontal flourish extending to the right.

**KHANH V. NGUYEN
PRIMARY EXAMINER**